

### REMARKS

By this amendment, applicants have amended claim 1 to more clearly define the invention, including providing antecedent basis for the phrase "the flow channel" in claims 9 and 10. Applicants have also added claims 14 - 23 to define further aspects of the present invention. All of claims 14 - 23 read on the elected species.

In view of the foregoing amendments to claim 1, it is submitted claim 1 provides antecedent basis for the phrase "the flow channel" in claim 9 and "said flow channel" in claim 10. Accordingly, reconsideration and withdrawal of the rejection of claims 9 and 10 under 35 USC 112, second paragraph, are requested.

Claims 1, 2, 4, 7, 9, 10 and 13 stand rejected under 35 USC 102(b) as allegedly being clearly anticipated by published British Patent Specification No. 632,360 (Britain 632,360). Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a device and method for eliminating particles contained in a stream of fluid. The device and method of the present invention can be classified as turbulent flow dust or particle removers since they rely on turbulent flow of the fluid stream and turbulent eddies carrying the particles to penetrate into stagnant zones to deposit the particles on the surfaces of objects forming the stagnant zones adjacent the flow passage. See, e.g., the paragraph bridging pages 1 and 2 of applicants' specification.

The embodiments now claimed use fibrous pads, fabrics or mats as the objects defining the stagnant spaces for collecting the particles. The elected species includes a flow channel in a tubular shape, wherein the flow channel is defined by the pad, mat or fibrous fabric. See, Figures 6a and 6b and the description at page 9, line 28 et. seq.

of applicants' specification.

Britain 632,360 discloses separation of solid particles from air or other gases and utilizes a wool-coated surface as a means for retaining separated dust, but specifically discloses that the separator "reduces the turbulence of the air to a minimum." See page 1, lines 31 - 36 of Britain 632,360. See, also, page 3, lines 24 - 33 of this document which indicates that the gas stream entering the channel is substantially void of turbulence. On the other hand, the device and method of the present invention involve the turbulent flow of the fluid stream. Britain 632,360 teaches away from this aspect of the present invention. Accordingly, it is submitted Britain 632,360 does not anticipate the presently claimed invention.

Claim 3 stands rejected under 35 USC 103(a) as allegedly being unpatentable over Britain 632,360 taken together with United States Patent No. 3,487,610 to Brown et al. Applicants traverse this rejection and request reconsideration thereof.

The Examiner relies on the patent to Brown et al as allegedly disclosing an apparatus for removing particles from a fluid stream similar to that of the British reference but wherein the elements are electrostatically charged. However, the patent to Brown et al discloses a device quite different than that of Britain 632,360. In Brown et al, the filter comprises a laminated structure of polymeric films having an exceptionally high and stable positive electrostatic charge on one side thereof and a corresponding negative charge at the other. The filter unit of Brown et al apparently relies solely on electrostatic charges to separate the particles from the fluid stream. In view of the differences between Brown et al and the British reference, it is submitted there would have been no motivation to combine the teachings of these documents in the manner urged by the Examiner. Moreover, even assuming, *arguendo*, one of

ordinary skill in the art would have combined the teachings of these documents, it is submitted the Brown et al patent does not remedy any of the basic deficiencies of Britain 632,360. Therefore, claim 3 is patentable over the proposed combination of references.

Claim 8 stands rejected under 35 USC 103(a) as being unpatentable over Britain 632,360 taken together with any one of United States Patent No. 3,545,178 to Sheehan, United States Patent No. 3,808,776 to Jesernig et al, United States Patent No. 3,955,947 to Hoon et al and United States Patent No. 4,289,630 to Schmidt, Jr. et al. Applicants traverse this rejection and request reconsideration thereof.

The Sheehan, Jesernig et al, McClure, Hoon et al and Schmidt, Jr. et al patents have been relied upon by the Examiner solely for their alleged teachings of shaker means for periodically shaking filter elements. However, even assuming, arguendo, the secondary references discloses this feature and are combineable with Britain 632,360, even the combined teachings would not have suggested the presently claimed invention. That is, the secondary references do not remedy any of the basic deficiencies of Britain 632,360. Accordingly, claim 8 is patentable over the proposed combination of references.

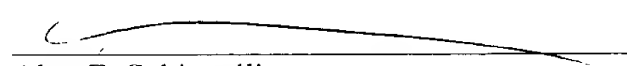
In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry.

Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 612.34893VV3), and  
please credit any excess fees to such deposit account.

Respectfully submitted,

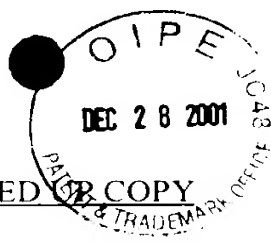
ANTONELLI, TERRY, STOUT & KRAUS, LLP



---

Alan E. Schiavelli  
Registration No. 32,087

AES/jla  
(703) 312-6600



REWRITTEN MARKED ~~OR~~ COPY

1. (Twice Amended)                      Device for eliminating the particles contained in a stream of fluid comprising a container (10) with a ~~passage~~ flow channel for the fluid stream in turbulent flow and a plurality of objects oriented ~~transversely relative to the direction of flow~~ adjacent the flow channel, said objects having edges communicating with the stream of fluid and defining between them at least one stagnant space where the particles are recovered; characterized in that the objects are comprised of a fibrous pad, a fibrous mat, or a fibrous fabric disposed along the gas stream such that the pads, fabrics, or fibers furnish additional edges for catching particles.

RECEIVED  
JAN - 2 2002  
TC 1700